lining; they lay their eggs on the dry soil, of which the mound is composed. The hole the birds make is small compared with the size of the birds themselves. Two eggs are laid, being pure white and well glossed. They measure: A 1·58 × 1·14, B 1·48 × 1·15 inch. These specimens were found on the 4th of October, 1899.

XL.—*The Birds of North Queensland.*—Part I. *On two Collections from Cooktown and the Neighbourhood of Cairns.* By Herbert C. Robinson and W. S. Laverock, M.A., B.Sc., Assistant in the Derby Museum, Liverpool. *With Field-notes by* E. Olive.

About the middle of last year Mr. E. Olive of Cooktown, a port situated on the east coast of Queensland, about 400 miles south of Cape York, the northernmost point of Australia, sent to one of us a small collection of birds which, though limited in extent, contained examples of several species of considerable interest. At our suggestion he somewhat later proceeded to Cairns, some 100 miles south of Cooktown, where he collected on the slopes of the Bellenden-Ker mountains, which attain an altitude of 5500 feet, being the highest in Queensland. The collections there formed were principally from the lower slopes of Mount Sapphiri (which is probably the Mount Sophia of the Admiralty Chart), and from Mount Bellenden Ker itself, which was ascended on three occasions. Here a camp was formed for about a week at an altitude of somewhat over 4000 feet, whence the mountain was worked to the summit. The collections from high elevations are unfortunately not so exhaustive as might have been hoped, for, owing to the unusual wetness of the season the mountain was enveloped in a perpetual fog, which made collecting a matter of extreme difficulty, and in addition the majority of the birds were in full moult.

Nevertheless the material obtained does not appear to bear out Mr. De Vis's statement (Rep. Scient. Exp. N.E.

Queensland), that there is no change of fauna at higher elevations. Many species do not appear to range above 2000 feet, while others seem to be of only exceptional occurrence below that elevation.

The fauna of the Cape York Peninsula is well known to present well-marked Papuan affinities, as is shown by the occurrence of such genera as *Rhododendron* in plants, *Syma*, *Tanysiptera*, and *Casuarius* in birds, and *Dendrolagus*, *Cuscus*, and *Dactylopsila* in mammals. In fact, it would appear that the portion of Australia between Cape York and the mouth of the Herbert River and east of the watershed should be regarded as a well-marked division belonging quite as much to the Papuan as to the Australian faunal region.

In the following list we have indicated by a * those species which occur only in the Cooktown Collection, while those which we have received from Cairns only have a † attached; species represented in both collections being unmarked.

1. *Urospizias approximans (Vig. & Horsf.).

Astur approximans Sharpe, Cat. Birds Brit. Mus. i. p. 126 (1874).

A small series of adult and immature birds.

"Shy and not particularly plentiful. Iris and feet yellow; bill black" (*Olive*).

2. *Leucospizias cinereus (Vieill.).

Astur cinereus Sharpe, t. c. p. 117.

Several specimens of both sexes, all of which have the ashy-brown semilunar marks on the feathers of the breast supposed to indicate immaturity.

"Of only occasional occurrence. Iris and feet yellow; bill black" (*Olive*).

3. *Erythrotriorchis radiatus (Lath.).

Urospizias radiatus Sharpe, t. c. p. 159.

Of this rare Goshawk we have received a single slightly immature male in somewhat worn plumage.

"Iris brown; feet yellow; bill black. Birds and insects in crop" (*Olive*).

4. *Accipiter cirrocephalus (Vieill.); Sharpe, t. c. p. 141.

Two females, both in immature plumage; one of them shot in June is moulting into the adult livery, as one or two fresh feathers with cross-bars are showing on the breast.

"Plentiful, but shy and extremely difficult to procure, as they fly very high. Iris and feet yellow; bill black" (*Olive*).

5. Baza subcristata (Gould); Sharpe, t. c. p. 357.

Evidently somewhat difficult to procure, though not really rare; we have received two adults only, one from Cooktown and the other from the neighbourhood of Bellenden Ker.

Regarding the latter Mr. Olive remarks that the species is not uncommon on the margins of the thick scrubs, where it is frequently to be seen perching on the loftier branches of dead trees, but there is difficulty in getting within shooting-distance. Iris yellow; feet bluish white; upper mandible black, lower yellowish.

6. *Haliastur girrenera (Vieill.); Sharpe, t. c. p. 315.

A single adult female.

"Found singly in forest country near the sea, but not at all plentiful: shy, and usually flies at a great elevation. Iris brown; feet dirty white; bill slate-grey" (*Olive*).

7. *Haliastur sphenurus (Vieill.); Sharpe, t. c. p. 316.

A pair of somewhat immature birds.

"A carrion-feeder: circles in the air at a great height looking for food. Twenty or thirty may be occasionally found feeding on a dead beast, some even going inside the carcase. I have noticed that they are able to tear up and devour their food on the wing. Iris brown; feet whitish; bill blackish slate" (*Olive*).

8. *Hieracidea orientalis (Schleg.); Sharpe, t. c. p. 422.

A small series of young and adult birds of both sexes.

9. *Hieracidea berigora (Vig. & Horsf.); Sharpe, t. c. p. 421.

A pair of adult birds.

It seems strange that this species and the preceding, which

appear to be representative forms of one another, should occur in the same district. *H. beriyora* is generally considered to be a dry country form of *H. orientalis*. Both species, however, have been recorded from Port Moresby, and a third form, *H. novæ-guineæ* Meyer, has been described from German New Guinea.

10. *Pandion leucocephalus Gould; Sharpe, t. c. p. 451.

Two females.

"Very shy and scarce: generally found in pairs in the neighbourhood of the sea, but sometimes further up the Endeavour River. Iris yellow; feet bluish white; bill black" (*Olive*).

11. *Strix candida Tick.; Sharpe, Cat. Birds Brit. Mus. ii. p. 308 (1875).

"Scarce. Iris black; feet and bill whitish horn-colour. Insects in crop" (*Olive*).

12. *Strix delicatula Gould.

Strix flammea Sharpe, t. c. p. 291.

"Iris black; feet brown; bill whitish horn-colour" (*Olive*).

13. *Hieroglaux humeralis (Hombr. & Jacq.).

Ninox humeralis Sharpe, t. c. p. 180.

A single specimen, of which the label has unfortunately been lost, agrees well with an example of this species from New Guinea with which we have compared it. It has been previously recorded as Australian by Mr. De Vis (Ann. Rep. Brit. New Guinea, Append. EE, p. 99, 1894).

14. †Hieroglaux connivens (Lath.).

Ninox connivens Sharpe, t. c. p. 176.

A single male from Mt. Sapphiri, Cairns.

This specimen has the stripes on the flanks somewhat more reddish-brown, and the coloration of the upper surface rather paler than the typical form.

In this it would appear to agree with the form separated as *Ninox peninsularis* Salvad., which, however, is described as being very considerably smaller than typical *H. connivens*.

The present bird, however, is fully equal in size to average specimens of *H. connivens*, having the wing 311 and the tail 191 mm.

"Scarce and shy: the specimen sent was shot roosting on the limb of a tree during the day. Iris yellow; feet yellow; bill yellow, with a black tip. A rat and some insects were in the stomach, and the orbital cavity was infested with a species of Entozoon" (*Olive*).

15. *Spiloglaux ocellata (Hombr. & Jacq.).

Ninox ocellata Sharpe, t. c. p. 170.

The two specimens sent agree well with one collected by Everett in Savu.

"Scarce and shy, spending the day in hollow trees. Iris yellow; feet whitish; bill black" (*Olive*).

16. †Spiloglaux lurida (De Vis).

Ninox lurida De Vis, Rep. Sci. Exped. N.E. Queensland, p. 31 (1889); North, Cat. Birds Austral. Mus., Striges (2nd ed.) p. 16 (1898).

A single female of this species was shot on Dec. 12th at the foot of Bellenden Ker. It is apparently quite distinct from *Spiloglaux boobook*, from which it is at once distinguished by its very much smaller size. Wing 211, tail 128 mm.

"Apparently fairly common, judging by the noise they make at night, but very difficult to obtain. The present specimen was one of four which were found perched on one tree. Iris yellow; feet whitish horn; bill black, the culmen bluish slate. The stomach contained insects" (*Olive*).

17. Strepera graculina (White); Sharpe, Cat. Birds Brit. Mus. iii. p. 57 (1877).

At Cooktown this species occurs only during the three winter months, but in the higher ranges round Cairns it is apparently found throughout the year, as specimens were shot on the summit of Mount Bellenden Ker at the commencement of December.

All the specimens sent are somewhat smaller than

others from New South Wales, as the following dimensions show :—

	Wing. mm.	Tail. mm.	Culm. mm.	Tars. mm.
Cooktown, Aug., 2 ♂	241–243	179–182	60–61	46–48
„ „ 2 ♀	230–233	171–173	53·5–57	45–46
Mt. Bellenden Ker, Dec., 4 ♂.	240–249	184–190	57–62	46–53
„ „ „ ♀ ..	228	178	54	45
N.S. Wales (Liverp. Mus.) ..	266–270	211–216	52–61	49–51

18. †Ptilorhis victoriæ Gould ; Sharpe, t. c. p. 155.

A very extensive series from Mount Sapphiri and Bellenden Ker ; about half the number are males in full breeding plumage, which seems to have been recently acquired, the remainder being either females or males in non-breeding plumage resembling the females. In the large series before us the character of the markings on the under surface varies much, one specimen being entirely uniform fawn beneath, while in young birds the black V-shaped bars are very marked.

"Occurring singly in the lower branches of trees in scrub country : very shy but exceedingly plentiful Breeding males have the iris brown ; feet and bill black ; and the angle of the gape yellowish. Other specimens are similar, but have the feet either blackish slate or bluish white. The species does not occur above about 2500 feet" (*Olive*).

19. Prionodura newtoniana De Vis, Proc. Linn. Soc. N.S.W. vii. p. 582 ; Robinson, Bull. Liverp. Mus. ii. p. 116 (1900).

We have (*loc. cit.*) recorded a specimen from Cooktown, which is apparently the extreme northern limit of the species.

We have also received a large series from Mt. Bellenden Ker, shot at an altitude of 4000–5000 feet. According to Mr. Olive, it is plentiful above 2000 feet, but he states that he has not seen any in the low country. The bower is generally built against a tree growing on a slope, and is 3 feet long by 2 feet thick and about 3 feet in height ; there are generally four passages meeting at right angles in

the centre of the bower, though some have three openings and others none at all. A little fruit is scattered about in and outside the bower.

Iris yellowish white; feet black (in younger specimens greenish slate); bill brown.

20. †Tectonornis dentirostris (Ramsay).

Scenopœus dentirostris Sharpe, Cat. Birds Brit. Mus. vi. p. 394 (1881).

Occurring in company with the preceding species on the higher levels of Mt. Bellenden Ker.

Iris brown; feet greenish white; bill black.

The "playground" of this species is a bare space 6 × 4 feet, cleared of sticks and old leaves and ornamented with freshly plucked green leaves placed with the upper surfaces downwards. The birds amuse themselves by hopping about in this open space and arranging and rearranging these leaves.

This genus is evidently a transitional form between *Chlamydera* and the Gardener Bower-birds (*Amblyornis*) of New Guinea.

21. †Ælurœdus maculosus Ramsay; Sharpe, t. e. p. 385.

Many specimens.

Evidently exceedingly common in the dense scrubs of the coast range, although rather difficult to procure as it is very shy and in plumage assimilates closely to the surrounding foliage. "Iris red; feet lightish slate or greenish slate; bill bluish white" (*Olive*).

A nest with two eggs in an advanced state of incubation was procured on November 22nd, and the *male* bird was shot off the nest, which is bowl-shaped in form, 160 mm. in external diameter and 120 mm. internal. Its external depth is 110, internal 50 mm. It is composed almost entirely of fine twigs neatly wound round and covered on the outside with the leaves of what is known locally as the Moreton Bay Chestnut, some of which are partially skeletonized. It was situated in dense scrub on the branch of a tree at a height of some 15 feet above the ground. The eggs are somewhat swollen ovals of a delicate creamy yellow approaching the

colour of old ivory, and with a smooth shining surface. They measure: A, 41 × 31 mm.; B, 38 × 29 mm. (approx.).

A third egg obtained on December 12th measures 38 × 28·5 mm.

22. *Chlamydera orientalis Gould.

Chlamydodera orientalis Sharpe, t. c. p. 389.

Six specimens, all males, from Cooktown have been sent, shot in June and July, two of which are just assuming the lilac occipital patch. "Iris white; feet slaty green; bill black" (*Olive*).

23. *Grallina picata (Lath.); Sharpe, Cat. Birds Brit. Mus. iii. p. 272 (1877).

A single specimen of this widespread Australian form.

"Iris white; feet black; bill white. Food, insects" (*Olive*).

24. Chibia bracteata (Gould); Sharpe, t. c. p. 236.

Many specimens of this common North Australian bird from Cooktown and the coast-ranges south of Cairns. At Cooktown, according to Mr. Olive, it is somewhat scarce in summer though plentiful in winter. "Iris red; bill and feet black" (*Olive*).

The nests and three clutches of eggs were also procured in November and December. One clutch consisted of one egg and the other two of three each, which is probably the normal number, while two nests each containing three freshly hatched birds were obtained on December 12th. The nest was placed on the limb of a tree about 20 feet above the ground in an open country, and is a loose structure composed entirely of the branched tendrils of some climbing plant. It is rather shallow and roughly circular in form, measuring 145 mm. in diameter and 82 mm. in depth externally, and 95 × 52 mm. internally.

The eggs are a slightly pointed oval of a dull chalky white, moderately spotted, especially at the larger end, with medium-sized purplish-brown blotches, many of which appear as if beneath the surface of the shell.

One clutch obtained on December 8th measures: A, 29 × 21; B, 28·5 × 21·5; C, 29 × 22 mm.

25. Mimeta flavicincta King.

Oriolus flavicinctus Sharpe, t. c. p. 206.

Oriolus viridissimus Sharpe, t. c. p. 207.

A considerable series of old and young birds from the same localities as the preceding species. The young birds agree well with the description of *O. viridissimus* Heine, as given by Sharpe (*loc. cit.*), which species is evidently not tenable. It is curious that in this species the young birds should be so much brighter in coloration than the adults, which is not the case in other species of *Mimeta*.

Adult birds have the iris red; feet slate; bill brownish red. Younger birds have the bill and feet black; iris brown.

26. *Mimeta sagittata (Lath.).

Oriolus viridis Sharpe, t. c. p. 212.

Six specimens from Cooktown, shot in June and September.

"Found plentifully in forest-country either in flocks or in pairs, feeding on the fruit of a species of *Ficus*. Iris red; feet slate; bill reddish brown" (*Olive*).

The material at our disposal is not sufficient to settle whether the form described as *M. affinis* (Gould) from Port Essington is valid, and, if so, whether these specimens should be referred to it.

After examining Gould's types, Mr. Whitmer Stone (Proc. Philad. Acad. 1891, p. 450) has stated that *M. affinis* is a perfectly valid species. Australian ornithologists recognize both forms and record them as occurring together in Northern Queensland (*cf.* Ramsay, Tab. List Australian Birds, pp. 11, 32, 1888).

Both forms certainly appear to be represented amongst thirteen specimens now before us from various parts of Northern Queensland. But whether those birds which assimilate most closely to *M. affinis* are merely immature specimens of *M. sagittata* (as we are inclined to think) we cannot at present decide.

The name *M. viridis*, hitherto universally used for the

Southern species, is unfortunately untenable, being founded on the *Green Grackle* of Latham (Gen. Syn. Suppl. ii. p. 129, 1801), subsequently Latinized as *Gracula viridis* (Ind. Orn. Suppl. p. xxviii, 1801). On reading the original description, however, it is obvious that it really applies to the Australian Cat-bird, *Ælurædus viridis*, to which, indeed, it has been applied by Dr. Sharpe (Cat. Birds Brit. Mus. vi. p. 385), evidently forgetting that he had previously referred the same description to the bird we are now discussing. The proper name, then, for the present species is *Mimeta sagittata*, founded on the *Striated Roller* of Latham (Gen. Syn. Suppl. ii. p. 122, 1801), Latinized as *Coracias sagittata* (Ind. Orn. Suppl. p. xxvi, 1801).

The specimen on which this name was founded passed into Lord Derby's Collection, and is fortunately still in existence in the Liverpool Museum.

27. Sphecotheres flaviventris Gould; Sharpe, t. c. p. 225.

Many specimens from both Cooktown and Cairns, where it seems to be one of the commonest birds.

"Adult males have the iris brown; bill black; feet pink; and the bare skin round the eyes red. Females and young males: iris brown; feet slate; bill brownish; orbital skin slate" (*Olive*).

The series of immature males that is before us affords very strong evidence that this species attains its adult plumage, partially at least, by direct colour-change in the feather, as many of the breast-feathers of the specimens before us have a marked yellow edging, whilst still retaining the brown shaft-stripe characteristic of the immature plumage. We have also received a clutch of two eggs obtained on December 30th in a high forest-tree 25 feet above the ground; they are of a very pale brownish olive with a tinge of green, thickly spotted, more especially towards the smaller end, with medium-sized reddish-brown spots; in shape they are a very pointed oval, almost pyriform. They measure: A, 30 × 22·5; B, 29 × 23 mm.

28. †Collyriocincla boweri Ramsay, Proc. Linn. Soc. N.S.W. x. p. 244.

One specimen, confounded with the two succeeding species by Mr. Olive, agrees well with two specimens in the British Museum collected by Cairns and Grant.

It is undoubtedly very distinct, and might be described as a diminutive richly-coloured race of *C. harmonica*. Whole upper surface dull lead-grey; the primaries dull brown edged with pale brown exteriorly; lores whitish, an ill-defined stripe from the lores to the eye rufous. Under surface pale rufous, the feathers of the throat and upper breast with strongly marked grey shaft-stripes. "Bill *black*; feet reddish brown; iris brown" (*Olive*).

Measurements: total length 200, wing 104, tail 85, tars. 27, culm. 23 mm.

29. *Collyriocincla cervineiventris North, Rec. Austr. Mus. iii. p. 49 (1897).

A single male from Cooktown agrees fairly well with the diagnosis of the above species, which is described as coming from the Dawson River, Central Queensland. Iris, bill, and feet brown.

The measurements of the specimen before us are: wing 96, tail 81, tars. 26, culm. 21 mm.

We are by no means sure that this species will not ultimately prove to be founded on specimens of the true *C. rufigaster* Gould, in somewhat bleached plumage—*i. e.*, specimens from districts of low rainfall.

29 a. †Collyriocincla gouldi (G. R. Gray).

Myiolestes gouldi G. R. Gray, P. Z. S. 1859, p. 180 (young ?).

? *Myiolestes griseatus* G. R. Gray, t. c. p. 180 (old ?).

Colluricincla parvissima Gould, Ann. & Mag. N. H. (4) x. p. 114 (1872) (young).

Pinarolestes rufigaster Sharpe (nec Gould), Cat. Birds Brit. Mus. iii. p. 296 (1877).

We have had many specimens before us (males and females)

which must be referred to this species: evidently a smaller and more richly coloured race of *C. rufigaster*. The measurements are:—

	Wing. mm.	Tail. mm.	Tars. mm.	Culm. mm.
(1) ♂. Bellenden Ker, Nov.....	88	72	26	23
(2) ♂. „ „ Dec.....	89	78	25	21
(3) ♀. „ „ „	86	72	25	22
(4) ♀. „ „ „	87	76	26	23
(5) ♂. Mt. Sapphiri, Oct.....	88	79	26	22
(6) ♀. Bellenden Ker, Nov.....	86	78	26	22

As regards its name, it is obvious that *Myiolestes gouldi* G. R. Gr. should be employed in preference to *C. parvissima* Gould, which was published 14 years later.

30. Graucalus hypoleucus Gould; Sharpe, Cat. Birds Brit. Mus. iv. p. 36 (1879).

A large series from Cooktown and Mount Sapphiri. Iris brown; feet and bill black. A nest, obtained on December 12th at Bellenden Ker, was situated in the fork of a tree, about 25 feet from the ground, and contained one fresh egg, which is oval, measuring 30 × 21·5 mm., of a dull olive-green, thickly marked with dull reddish-brown blotches, which form a zone at the larger end.

31. *Graucalus melanops (Lath.); Sharpe, t. c. p. 30.

Adult and immature birds of both sexes were shot at Cooktown in June and July. Iris &c. as in the preceding species.

32. Graucalus swainsoni Gould.

Graucalus lineatus Sharpe, t. c. p. 40.

Somewhat scarce at Cooktown, but evidently much commoner round Cairns. "Iris yellowish white; feet and bill black" (*Olive*).

Immature birds have the feathers of the rump and lower back tipped with white, the white bars on the lower surface broader than in older birds, and the under wing-coverts and axillaries pure white, only faintly barred with black.

A still younger specimen has obsolete barrings on the throat and upper breast.

33. Edolisoma tenuirostre (Jard.); Sharpe, t. c. p. 55.

"Generally found in company with *Graucalus melanops*, but by no means common. Iris brown; bill and feet black" (*Olive*).

34. *Lalage karu (Less. & Garn.); Hartert, Nov. Zool. v. p. 524 (1898).

Lalage leucomelæna Sharpe, t. c. p. 106 (partim).

Two males and a female from Cooktown.

"Very plentiful and not shy; generally in pairs. Iris brown; bill and feet black" (*Olive*).

35. *Piezorhynchus nitidus Gould; Sharpe, t. c. p. 416.

Two males.

"Plentiful in the mangrove swamps. Iris brown; feet black; bill slate with the tip black." (*Olive*).

36. †Piezorhynchus gouldi (G. R. Gr.); Sharpe, t. c. p. 419 (partim).

Two specimens, also a nest and eggs, in almost every respect indistinguishable from the nest and eggs of *Arses candidior* described by Mr. Le Souëf in 'Ibis,' 1897, p. 397.

37. †Monarcha melanopsis (Vieill.); Sharpe, t. c. p. 430.

"Iris brown; feet black; bill slate" (*Olive*).

38. †Arses kaupi Gould; Sharpe, t. c. p. 411.

"Fairly plentiful in scrub country, and not shy; they run up and down the tree-trunks somewhat like a Creeper. Iris brown; feet black; bill bluish slate; wattle round eye royal blue" (*Olive*).

39. †Heteromyias cinereifrons (Ramsay); Sharpe, t. c. p. 239.

Three specimens. Apparently an upland species found above 2000 feet.

According to Mr. Olive they are ground birds, and only take refuge in the trees when disturbed. "Iris brown; feet whitish; bill black with a white tip" (*Olive*).

40. †Pœcilodryas nana (Ramsay); Sharpe, t. c. p. 245.

A single female from Bellenden Ker apparently belongs to this species.

"Scarce, but not shy; generally in pairs; frequents low shrubs. Iris brown; feet flesh-colour; bill brown" (*Olive*).

41. †Malurus amabilis Gould; Sharpe, t. c. p. 293.

A small series comprising adult males (*M. amabilis*), adult females (*M. hypoleucus*), and young birds of both sexes in the brown plumage characteristic of immature birds belonging to all species of the genus.

"Plentiful, occurring in small parties of one adult male and four or five young males and females, and frequenting low shrubs. Adult males have the iris black, feet brown, bill black; an adult female, iris black, feet flesh-colour, bill black; and young birds, iris brown, feet and bill light brown" (*Olive*).

42. †Geocichla cuneata De Vis, Proc. Roy. Soc. Queensl. vi. p. 243 (1889); Seebohm, Mon. Turdidæ, part i. pl. vii. (1898).

Shot at an altitude of over 2000 feet on Bellenden Ker, and the only one as yet seen by Mr. Olive.

"Iris brown; feet whitish brown; bill brown" (*Olive*).

A fairly distinct species, readily distinguished from all the other Australian *Geocichlæ* by its very long bill.

43. †Cisticola exilis (Lath.); Sharpe, Cat. Birds Brit. Mus. vii. p. 271 (1883).

A pair only, from Bellenden Ker; the male in the plumage described by Gould as *C. ruficeps*. "Generally three or four together, always in long grass. Iris brownish white; feet flesh-colour; bill brown" (*Olive*).

44. †Psophodes crepitans lateralis North, Records Australian Mus. iii. p. 13 (1897).

Numerous specimens agreeing well with the description and dimensions given by Mr. North, the female being a very much smaller bird than the male.

"Fairly plentiful in scrub country, but of very skulking

habits, keeping almost exclusively to the ground; they are generally found in parties of three (two adults and a young bird). The feathers on the top of the head form a crest, which can be erected at will. Iris brown; feet and bill black" (*Olive*).

45. †Orthonyx spaldingi Ramsay; Sharpe, t. c. p. 331.

We have received a fine series of this very distinct species, including immature birds. A young male has the upper surface much as in *O. spinicauda*, and the under surface dull rusty brown, each feather broadly edged with blackish, while one or two white feathers of the adult plumage are just appearing. In somewhat older males the lores and sides of the head are rufous as in the female.

"Scarce and shy; found in much the same situations as the preceding species, and, like them, keeping entirely to the ground; they are very noisy when disturbed, and if only wounded when shot, will take shelter in the first hole available. Iris brown; feet and bill black; skin round the eye bluish white" (*Olive*).

46. †Pachycephala gutturalis (Lath.); Gadow, Cat. Birds Brit. Mus. viii. p. 192 (1883).

?*Pachycephala queenslandica* Reichenow, Ornith. Monatsb. vii. p. 8 (1899).

"Four males, shot at high elevations on Mt. Bellenden Ker, seem to belong to this species. "Iris brown; bill and feet black" (*Olive*).

47. *Pachycephala rufiventris (Lath.); Gadow, t. c. p. 208.

Two males and two females from Cooktown.

One male shot in June differs from the other in having broad black shaft-stripes to the feathers of the crown. "Iris red; feet brown; bill black" (*Olive*).

48. *Cracticus nigrogularis picatus Gould; Gadow, t. c. p. 96.

A single adult female from Cooktown shot in November. "Iris brown; feet black; bill slate-colour tipped with black" (*Olive*).

From its dimensions—wing 161, tail 130, culmen 39·5, tarsus 31 mm.—it is evident that this specimen must be referred to this race, originally described from Port Essington, but which has not (so far as we are aware) been hitherto recorded from further east than the Gulf of Carpentaria.

49. Cracticus rufescens De Vis, Proc. Linn. Soc. N.S.W. vii. p. 562 (1883); Sharpe in Gould's Birds of New Guinea, iii. pl. xvi. (1887); Rothsch. Bull. B. O. C. vol. x. p. xl; id. Ibis, 1900, p. 374.

Cracticus quoyi auct. from Eastern Australia.

It is after very considerable hesitation that we have come to the conclusion that all specimens of the black *Cracticus* from Eastern Australia must be referred to *C. rufescens* De Vis. This name, however, is rather misleading, as it is only the young bird that is rufescent.

In the course of the last three months some thirty specimens of the species from Cooktown and Cairns have passed through our hands. Of these, three have been in the plumage figured and described as *C. rufescens*. In one specimen, however, several of the primaries were black, and in another the under wing-coverts were partially black. We had called Mr. Olive's special attention to the point, and he assures us that the *C. rufescens* in brown plumage sent from Bellenden Ker was found associating with the black-plumaged birds, and that he had no doubt whatever that they were one and the same species, as he has stated on the label. The large series of birds in black plumage present certain difficulties among themselves, some being less lustrous than others, and having the basal portions of the flank-feathers greyer; but they cannot certainly be distinguished from the Port Essington and New Guinea bird, which is, however, *black in every stage* of plumage.

"Found generally in thick scrub country, and only plentiful during the winter months. Iris brown; feet black; bill black, the basal portion bluish" (*Olive*).

50. †Dicæum hirundinaceum (Lath.); Sharpe, Cat. Birds Brit. Mus. x. p. 19 (1885).

Two males from Bellenden Ker.

"Rather scarce; generally in pairs, and always in trees near the ground. Iris brown; bill and feet black. Food, insects" (*Olive*).

51. †Cinnyris frenata (S. Müll.); Gadow, Cat. Birds Brit. Mus. ix. p. 85 (1884).

Several males from Bellenden Ker, and a female with the nest and two eggs from Mount Sapphiri.

"Iris brown; feet and bill black" (*Olive*).

The nest is a spindle-shaped structure 420 mm. long, and 30 mm. wide at its widest part, of which 120 mm. of the middle third is occupied by an elliptical chamber lined with feathers and the pappus of some composite plant. It is composed of a felted mass of spider-web and skeletonized leaves, and is rather thickly covered with irregular strings or masses of the excrement of caterpillars (the occurrence of which may be purely accidental), and is attached to the long trailing runner of a grass overhanging the steep bank of a creek. The eggs, two in number, are pointed ovals of a whitish ground-colour, very thickly and evenly clouded with fine mottling of a greenish-brown tint, so thickly, indeed, at the larger end as to obscure the ground-colour of the eggs, which measure, A 17 × 12 mm., B 17 × 12·5 mm.

52. Myzomela obscura Gould; Gadow, t. c. p. 143.

"Iris brown; feet brown or greenish slate; bill black. Food, honey" (*Olive*).

53. †Ptiloti notatas Gould.

Ptilotis analoga Gadow, t. c. p. 227 (partim).

A small series apparently belonging to this species, and not to the closely allied *P. gracilis*.

"Iris brown; feet slate; bill black; gape yellow" (*Olive*).

54. †Ptilotis macleayana Rams.

Ptilotis flavistriata Gadow, t. c. p. 232.

Three males of this interesting Honey-eater from Mount Sapphiri. Iris &c. as in the preceding species.

This species is apparently of very limited distribution; it does not, so far as we are aware, occur south of Cardwell,

and reaches its northern limit at Cooktown, where one of us (H. C. R.) obtained two specimens in Aug. 1896.

55. †Ptilotis frenata (Ramsay) ; Gadow, t. c. p. 231.

Three specimens were secured on Mount Bellenden Ker at an altitude of over 2000 feet.

" Plentiful ; occurring either in pairs or flocks, especially on trees in bloom, feeding on the nectar. Iris slatish blue ; feet slate ; bill black, the basal portion yellow ; periocular skin whitish " (*Olive*).

56. †Glyciphila modesta G. R. Gr. ; Gadow, t. c. p. 215.

A pair of this sombre-coloured little bird, with their nest and eggs, were secured on Nov. 1st. " Iris, feet, and bill reddish brown " (*Olive*).

The nest, which is a slightly elongated purse-shaped structure, was found suspended to the terminal twigs of a small Eucalyptus on the banks of a creek, about five feet above the water. It is almost entirely composed of the papery bark of the Ti tree, and is furnished with a flat covering or dome woven into the leaves of the Eucalyptus to which it is attached. Two fresh eggs were in the nest : they are slightly elongated ovals, somewhat pointed at one end, of a pearly white with a few scattered spots of a dull blackish brown, which form an ill-defined zone at the larger end, the spots being very much larger on one egg than the other. They measure : A 16·5 × 12 mm., B 17 × 13 mm. A single egg obtained on the same date has the markings more evenly distributed, and measures 17 × 13 mm.

57. †Philemon buceroides Swainson ; Gadow, t. c. p. 272.

" Iris brown ; feet slatish green ; bill black ; bare parts black " (*Olive*).

58. †Philemon citreogularis (Gould) ; Gadow, t. c. p. 277.

A single specimen from Mount Sapphiri, marked female and apparently young, as it has the chin and throat yellow, though the peculiar whitish spatulate tips to the breast-feathers, usually a sign of maturity, are well developed. " Iris brown ; feet slate ; bill black ; bare parts slate " (*Olive*).

59. *Philemon argenticeps (Gould); Gadow, t. c. p. 270.

"Found in flocks; are very noisy and pugnacious birds, generally frequenting trees in flower and feeding on the insects attracted thereby. Iris red; feet and bill black; bare parts slaty black" (*Olive*).

60. †*Entomyza cyanotis harterti, subsp. nov.

Specimens from Cooktown obtained in June and July present such differences from the typical form, that we think they may be regarded as representing a distinct race. The buff edgings to the inner webs of the primaries are somewhat paler and more extensive (reaching to the shaft) than is the case with a series of eight specimens from N. S. Wales and Southern Queensland, with which we have compared them. The primaries, with the exception of the two outer ones, have their outer webs narrowly edged with greenish sulphur-yellow, a feature we have not noticed in Southern specimens, but which would probably show only in freshly-moulted birds. The median band of black feathers on the crown is also much narrower. The most marked point of difference, however, is the very much smaller size, as the following table shows :—

	Wing. mm.	Tail. mm.
Cooktown (*Olive coll.*) (three females)..	135–139	108–112
New South Wales and Moreton Bay (eight specimens) (Liverp. Mus.)	150–161	135–156

"Iris white; feet slate; bill black; skin above the eye indigo, below pale blue" (*Olive*).

E. albipennis Gould, from Port Essington, whence we have a typical specimen in the Liverpool Museum, is a very distinct species, readily recognizable by the *white* coloration of the inner webs of the primaries extending quite to the shaft, which coloration is visible on the external aspect of the wing, and by having the proximal half of the outer webs of the primaries pale yellowish green, sharply defined from the blackish terminal portion. In life the coloration of the naked ocular region would probably be different, as in the skin of *E. albipennis* before us it is dull greyish, not black as in *E. cyanotis*.

61. Lamprocorax metallica (Temm.).

Calornis metallica Sharpe, Cat. Birds Brit. Mus. xiii. p. 138; Le Souëf, Ibis, 1898, p. 53.

This bird was very common at all the localities visited by Mr. Olive, who obtained a large series of adult birds, together with the nests and numerous clutches of eggs. The latter have recently been well described by Mr. Le Souëf (*loc. cit.*). The greatest number of eggs in any of the clutches we have received is four.

62. Artamus leucorhynchus leucopygialis Gould.

Artamus leucogaster Sharpe, t. c. p. 3.

Artamus leucorhynchus subsp. *minor* Hartert, Nov. Zool. vi. p. 424 (1899).

Australian specimens have the bill certainly smaller than the form found in Java and the Philippines, though in five examples before us from Cooktown and Cairns we find the culmen to be 17·5–19 mm., and not 15–16 mm. as given by Mr. Hartert. Possibly we measure in a different way. In any case Gould's name for the form is the one that must be used.

63. Pitta strepitans simillima Gould; Sclater, Cat. Birds Brit. Mus. xiv. p. 428.

Not very common at Cooktown, but much more abundant at Cairns, where it frequents dense scrub and is very hard to see, though it may be heard pattering over the dead leaves. "Iris brown; feet flesh-colour; bill black" (*Olive*).

The only constant character by which this subspecies can be distinguished from the typical form is its smaller size. The white speculum on the wing is very variable; normally it extends from the inner web of the fourth to the outer web of the sixth primary, and this is the case in five out of the eight adult specimens before us. In one it extends to the outer web of the seventh, in another it commences on the inner web of the third, whilst in yet another the speculum is almost absent, being but faintly indicated on the outer web of the fifth primary.

64. Caprimulgus macrurus Horsf.; Hartert, Cat. Birds Brit. Mus. xvi. p. 537.

"Iris brown; feet pale pink; bill blackish brown" (*Olive*).

65. †Eurostopus albigularis (Vig. & Horsf.); Hartert, t. c. p. 607.

A single male from Cairns, regarding which Mr. Olive notes: "This specimen was procured in forest-country at the foot of Mt. Sapphiri. The species seems to be scarce, as I have only seen this specimen, which it took me over a week to secure. Iris brown; feet reddish brown; bill brown. Insects in stomach."

66. *Eurostopus argus Hartert; id. t. c. p. 608.

"Several specimens from Cooktown and Mt. Sapphiri. Always in pairs. Sleep on the ground during the day, and are very hard to find, as it is impossible to see them until they are flushed, as their colour assimilates so closely to dead leaves. They make no nest, but lay their single egg on the ground, generally on a stony ridge. Iris, feet, and bill brown" (*Olive*).

67. Podargus papuensis Q. & G.; Hartert, t. c. p. 630.

A solitary specimen from Cairns and a large series from Cooktown in very varying plumage, some of them apparently in the stage of plumage described by Gould as *C. plumiferus*. Some of them are labelled as having the iris "red," others yellow, and the more rufous birds are sexed female.

68. *Podargus phalænoides Gould; Hartert, t. c. p. 634.

"Iris yellow; feet purplish brown; bill brown" (*Olive*).

69. *Ægotheles novæ-hollandiæ (Lath.); Hartert, t. c. p. 651.

Three specimens, with rufous auriculars and the centre of the abdomen pure white, are evidently referable to *Æ. leucogaster* Gould, if that species is valid, which these specimens seem to show may be the case. "Iris brown; feet pale pink; bill black" (*Olive*).

70. *Merops ornatus Lath.; Sharpe, Cat. Birds Brit. Mus. xvii. p. 74 (1892).

Two adult males in freshly moulted plumage.

"Plentiful; nesting in flat sandy country in holes about four feet long, with the nesting-chamber about 18 inches from the surface. Iris red; feet and bill black" (*Olive*).

On the Stewart River, where the Overland Telegraph wire from Cape York crosses the stream, I (H. C. R.) found this species to be especially abundant in August 1896, perching on the wire in groups of five or six.

71. †Eurystomus pacificus (Lath.).

Eurystomus australis Sharpe, t. c. p. 36.

Inaccurate though Latham's description undoubtedly is, we think that after all his name should be employed. We have examined large numbers of Latham's types, to whose authenticity no possible doubt attaches, and it is extraordinary to find how difficult it is to reconcile the descriptions of many of them with the actual specimens from which these descriptions were taken.

"Found in forest country. Plentiful but rather shy and difficult to procure, as it always perches in lofty trees; occurs, as a rule, in flocks, but sometimes in pairs or singly. Iris brown; bill and feet red" (*Olive*).

72. Dacelo gigas (Bodd.); Sharpe, t. c. p. 204.

Dacelo gigas, subsp. *minor* Robinson, Bull. Liverp. Mus. ii. p. 116 (1900).

At one time, with only young specimens before us, we were inclined to consider that the North Queensland form might perhaps be subspecifically distinguished by the absence of blue on the rump and wings, and by its smaller size. We find, however, that this is not the case, as the receipt of a small series from Cairns shows that adult birds are, if anything, brighter in coloration than more southern specimens, though in size they are on the average slightly smaller.

"These birds feed on reptiles and are found in open forest-country, generally solitary, though the mate is never far away. The nest is made in the small 'termitaria' which

are found on dead trees. Iris brown; feet yellowish white; bill black above, yellowish white beneath" (*Olive*).

73. *Dacelo leachi Vig. & Horsf.; Sharpe, t. c. p. 206.

Adults and immature birds from Cooktown.

"Habits similar to the above, but the nest is made in hollow trees, the usual number of eggs being two or three (*Olive*).

74. Halcyon sanctus (Vig. & Horsf.); Sharpe, t. c. p. 267.

75. Halcyon macleayi Jard. & Selby; Sharpe, t. c. p. 254.

"Very plentiful; sometimes found in parties of five or six, but more usually in pairs. Nests in termites' mounds, and lays five eggs. Iris brown; feet black; bill black above, yellowish beneath" (*Olive*).

76. †Halcyon sordidus Gould; Sharpe, t. c. p. 278.

A single specimen from the mangroves at the mouth of the Russell River seems rather brightly coloured on the wings and tail. "Iris brown; feet black; bill black above, yellowish white beneath" (*Olive*).

77. †Alcyone pusilla (Temm.); Sharpe, t. c. p. 171.

Two males of this somewhat rare little Kingfisher from Mt. Sapphiri.

"Very plentiful, but exceedingly shy and difficult to obtain. They generally occur in pairs, sitting on boughs overhanging creeks in thick scrub. Iris brown; feet and bill black. Food, fish" (*Olive*).

78. †Alcyone azurea pulchra Gould; Sharpe, t. c. p. 169; Hartert, Nov. Zool. vi. p. 427 (1899).

A small series of adult and immature birds from Mounts Sapphiri and Bellenden Ker seems to belong to this subspecies, although the blue and lilac on the flanks is not so pronounced as in the birds from Port Essington. The dimensions are slightly larger than those given by Mr. Hartert (*loc. cit.*) for specimens from Cape York, the wing in the adult birds being 76–77 mm.

"Habits similar to those of the preceding species; the nest is made in holes in the banks of creeks, and five eggs are the usual complement. Iris brown; feet red; bill black with whitish tip" (*Olive*).

79. †Tanysiptera sylvia Gould; Sharpe, t. c. p. 300; Le Souëf, Ibis, 1898, p. 55.

Two adult females from Bellenden Ker.

The nest of this bird was discovered on December 5th. It was a chamber about 3 inches in diameter at the end of a tunnel 18 inches long, excavated in a termites' mound, and contained two eggs, which were unfortunately somewhat damaged in blowing. They are subspherical, of a beautiful translucent pearly white, and measure: A 26·5 × 24 mm., B 28 × 24 mm.

80. *Cuculus pallidus (Lath.); Shelley, Cat. Birds Brit. Mus. xix. p. 261.

"Iris brown; feet and bill black. Food, insects" (*Olive*).

81. †Cuculus intermedius Vahl; Shelley, t. c. p. 252.

Evidently not uncommon in the neighbourhood of Bellenden Ker, as eight specimens were collected during December. "Iris brown; feet yellow; bill black; skin round the eyes yellow" (*Olive*).

82. *Cacomantis flabelliformis (Lath.); Shelley, t. c. p. 266.

Several adult birds.

"Found singly at Cooktown during the winter months. Iris and feet brown; bill black; orbital skin yellow" (*Olive*).

83. †Cacomantis variolosus (Horsf.); Shelley, t. c. p. 272.

One specimen which is nearly adult and a very immature bird appear to belong to this species; the latter may, however, be an immature *Cacomantis flabelliformis*.

84. †Chalcococcyx basalis (Horsf.); Shelley, t. c. p. 294.

Three specimens from Bellenden Ker.

One is very young and has the under surface almost

uniform white, with only faint indications of bars on the throat; under wing-coverts uniform white, unbarred; tail with much less rufous than in the adult. "Iris brown; feet slatish green; bill blackish. Food, insects" (*Olive*).

85. *Chalcococcyx plagosus (Lath.); Shelley, t. c. p. 297.

"Rather scarce at Cooktown, where it occurs only during the four winter months. Iris yellow in the male, brown or whitish brown in the female; feet brown or black; bill black" (*Olive*).

86. †Eudynamis cyanocephala (Lath.); Shelley, t. c. p. 324.

Three males from Bellenden Ker and Sapphiri, one of which still shows remnants of the immature plumage. "Iris red; feet slate; bill bluish white. Food, fruit" (*Olive*).

87. Centropus phasianus (Lath.); Shelley, t. c. p. 340.

"Plentiful in forest country, feeding on the ground. When disturbed they fly to the nearest tree and ascend it by a series of short flights from branch to branch. They nest in tussocks of grass and lay three eggs." Mr. Olive has sent four specimens from Cooktown, shot in June and July, of which one is in the black breeding-plumage with a few remnants of the lighter plumage on the lower surface; another, possibly a young bird, is moulting into the *non-breeding-plumage*, whilst two others are just acquiring the breeding-plumage. All these birds have the iris *white*; feet slate; bill black or brown.

Eight specimens from Mount Sapphiri, collected in October, have almost completed their moult into the breeding-plumage and have the iris *red*, feet and bill slate. In this species *females* are distinctly larger than males, the difference in the length of the tail being very marked.

88. †Scythrops novæ-hollandiæ (Lath.); Shelley, t. c. p. 330.

A small series of adult and immature birds from Mount Sapphiri; the latter have the abdomen and under wing-coverts faintly barred with greyish black.

"Plentiful, feeding in flocks on very high trees. Iris red; feet slate; bill slatish with a white tip; orbital skin red" (*Olive*).

89. Trichoglossus novæ-hollandiæ septentrionalis Robinson, Bull. Liverp. Mus. ii. p. 115 (1900).

Trichoglossus novæ-hollandiæ (partim) Salvad. Cat. Birds Brit. Mus. xx. p. 58 (1891); Mivart, Mon. Loriidæ, p. 109, pl. xxxv. (1898); Hartert, Nov. Zool. vi. p. 428 (1899).

The northern representative of this common Australian Lory can readily be distinguished subspecifically by its smaller size and by the brighter and purer blue of the head and abdominal patch.

Some of the numerous specimens received from Mounts Sapphiri and Bellenden Ker agree very fairly with the original specimens from Cooktown, whilst others approach the typical form more nearly so far as coloration is concerned, but all are distinctly smaller in dimensions. One specimen from Cooktown is remarkable for having the tail composed of fourteen feathers, and not the normal number of twelve. "Iris red; feet black; bill red" (*Olive*).

90. Psitteuteles chlorolepidotus neglectus Rchnw. Ornith. Monatsb. vi. pp. 4, 5 (1898).

Several specimens from Cooktown and Cairns agree pretty well with Herr Reichenow's diagnosis, though some of the Cairns specimens are rather larger, approaching the typical form. *P. neglectus* cannot, however, be regarded as more than a subspecies, as there is no tangible difference except in size between northern and southern specimens. "Iris red; feet greenish yellow; bill red. Food, seeds and honey" (*Olive*).

91. Cacatua galerita triton (Temm.); Salvad. t. c. p. 118.

Two specimens from Cooktown and five from Cairns.

Regarding the specimens from Cairns, Mr. Olive writes:—

"Plentiful but very shy; generally in flocks, but sometimes in pairs and singly. I have counted nearly 200

roosting in the trees close together; in the morning they separate and go out in small flocks to their feeding-grounds and return to their roosting-place after sunset. They nip off all the leaves and smaller twigs from the trees on which they roost. Iris brown; feet and bill black; bare skin on the face *bluish white*" (*Olive*).

At least five forms of the larger Sulphur-crested Cockatoo have been described at different times, viz.:—

C. galerita. Australia.

C. licmetorhyncha. Tasmania.

C. triton. Central Dutch New Guinea.

C. macrolopha. Western Papuan Islands and Aru Islands.

C. trobriandi. Louisiades and D'Entrecasteaux group.

If all these forms, which are mainly founded on differences in dimensions, and only two of which, *C. galerita* and *C. triton*, are generally recognized, are to be maintained, it becomes a question to which of them our specimens with the wing 311–330 mm. are to be referred. The colour of the skin round the eye, noted by Mr. Olive as *bluish white*, seems to indicate an approach to the race occurring at *Port Moresby*, *C. triton* auct., to which species a female collected by Dr. Coppinger at Hammond Island, Torres Straits, has been referred by Salvadori (*loc. cit.*). In addition, the yellow tinge on the ear-coverts is less marked than in specimens from more southern parts of Australia.

There is no doubt that if all the forms cited were inhabitants of one continental area, it would be considered by many unnecessary to distinguish specifically even such markedly different forms as *C. trobriandi* and *C. galerita*.

If we compare specimens from Northern New Guinea with others from Tasmania or New South Wales, the difference in dimensions is sufficiently striking, whilst the bare parts are also differently coloured. According to Salvadori, however (Orn. Pap. i. p. 95), specimens fully equal in size to the larger examples from Australia do occur in New Guinea, while, on the other hand, specimens from Northern Australia are undoubtedly smaller than many of those from New Guinea.

Locality.	Wing. mm.	Culmen. mm.
Port Moresby (*C. triton*) (*Liverp. Mus.*)	324	47
Salwatti (*C. macrolopha*) „ ..	289	38
Port Essington, ♂ „	313	38
"South Australia" (probably Northern Territory) (*Liverp. Mus.*)	318	42
Cape York, ♀ (*Liverp. Mus.*)	309	42
Cooktown, ♂ (*Olive Coll.*).....	327	40·5
„ ♂ „	330	40
Mt. Sapphiri, Cairns, ♂ (*Olive Coll.*).....	315	39
„ „ ♂ „	315	42·5
„ „ ♂ „	311	38
Mt. Bellenden Ker, Cairns, ♂ (*Olive Coll.*) ..	322	40
New South Wales (*C. galerita*) (*Liverp. Mus.*)	370	52
Launceston, Tasmania	352	52
„ „ (*C. licmetorhyncha*) ..	348	53

This table shows that the Northern Australian specimens come near those from New Guinea in size at least; we have accordingly recorded them as *C. triton*, regarding all these forms merely as belonging to one very variable species, which may or may not be divided into subspecies according to individual opinion.

92. †Aprosmictus cyanopygius (Vieill.); Salvad. t. c. p. 486.

Mr. Olive has forwarded a very large series of this species from the neighbourhood of Cairns.

The dimensions are slightly less, and the scarlet of the head and under surface much deeper, than in specimens from Moreton Bay and Port Stephens.

"Plentiful, but very shy, occurring in large flocks and occasionally in pairs; not always easy to procure, as the line of flight is usually very high. *Male*: iris yellow; feet black; bill red, with the tip of the upper mandible and the whole of the lower black. *Female*: iris yellow; feet and bill black" (*Olive*).

The eggs of this bird were procured on October 26th; the nest was situated in the hollow of a tree, with the entrance about twenty feet above the ground. The eggs were five in number and were much incubated, so much so

that two of them hatched out before they were blown. They are white in colour, with a slight gloss, subspherical in form, and measure: A 34 × 28·5, B 34·5 × 29, C 35 × 28 mm.

93. *Ptistes erythropterus (Gm.); Salvad. t. c. p. 481.

"Four specimens from Cooktown.

"Found in forest-country, generally in parties of two or three, but occasionally in flocks. They nest in hollow trees, generally about ten to twelve feet from the entrance, and lay two or three eggs" (*Olive*).

P. coccineopterus Gould, of which there is an authentic specimen from Port Essington in the Derby Collection, is almost inseparable from the true *P. erythropterus*. It is undoubtedly slightly smaller than specimens from Moreton Bay, but the difference is inconsiderable, and does not appear to be constant, as Salvadori (*loc. cit.*) has observed. We cannot recognize the differences in coloration mentioned by Mr. Le Souëf (Ibis, 1899, p. 360).

94. *†Platycercus amathusia Bp.; Salvad. t. c. p. 548.

"A ground bird, living on seeds; generally found in parties of two or three, but by no means plentiful. Iris brown; feet slate-grey; bill white" (*Olive*).

This species is one of the rarer of the Australian Psittaci, and though widely distributed over the northern portion of the continent seems to be nowhere plentiful. Like many specimens of its near ally, *P. pallidiceps*, the present species is frequently irregularly flecked with red about the head. Two out of three skins before us are so marked.

95. *†Platycercus elegans nigrescens Rams.; Salvad. t. c. p. 543, note.

We have five specimens of this race from near the summit of Bellenden Ker; they agree well with Mr. Ramsay's diagnosis, except that he describes it, possibly by a *lapsus calami*, as having "the feathers on the *head*, hind-neck, and back almost all black." In our specimens the head is dark red, uniform in colour with the lower surface.

"Very plentiful but shy. Found in flocks and pairs, but

very seldom singly; if the black-and-white Magpie [*Strepera graculina* ?] sees them settle on a tree, it flies at them and drives them away. Iris brown; feet black; upper mandible whitish, lower slate-colour" (*Olive*).

96. *Ptilinopus regina (Swains.).

Ptilinopus swainsoni Salvad. Cat. Birds Brit. Mus. xxi. p. 95 (1893).

A small series from Cooktown.

"Plentiful only during the winter months. Iris yellow; feet slate; bill green" (*Olive*).

97. Ptilinopus superbus (Temm.); Salvad. t. c. p. 112.

Specimens have been received from each locality visited. "Iris yellow; feet red; bill green" (*Olive*).

Two nests, found at Bellenden Ker on December 29th, were situated in dense scrub at a height of about six feet above the ground, and were merely a slight platform of sticks, resembling the nest of *Megaloprepia assimilis*, but smaller. Each nest contained one egg, which is like that of most Pigeons, being pure white and of a regular oval. The shell is very smooth and slightly lustrous. They measure: (1) 30·5 × 21, (2) 30 × 31 mm.

98. Megaloprepia assimilis Gould; Salvad. t. c. p. 168.

One male from Cooktown, where the species is not of regular occurrence, and a large series from Cairns, which are slightly larger, showing a tendency to intergrade with *M. magnifica*. Regarding the specimens from Cairns, Mr. Olive says:—"Very abundant here, and usually found in pairs or singly, except when feeding, when they are gregarious. Iris red; feet green; bill red at the base, with a yellow tip; orbital skin green." A nest and eggs have also been forwarded by Mr. Olive. The nest was found in thick scrub on October 14th. It was built on the limb of a tree about ten feet from the ground, and contained one freshly laid egg. It is a very frail structure, nearly flat, and composed of a few small sticks, loosely interwoven with the coarse tendrils of some creeping plant. The egg, which is dull

white, of the usual Pigeon type, is in form a slightly swollen oval, and measures 34 × 27 mm., whilst another collected on October 26th is 36 × 26 mm., being slightly more elongate in shape.

99. Myristicivora spilorrhoa (G. R. Gr.); Salvad. t. c. p. 231.

"Abundant at Cooktown during the winter months; breeding in enormous multitudes on the outlying islands of the Barrier Reef, some eight or nine miles from the mainland. In the early morning they wend their way to their feeding-grounds in the scrubs, sometimes flying as great a distance as 40 miles, and return to roost on the islands at night. They feed principally on a species of nutmeg (*Myristica insipida*), of which I have found as many as eight or nine fruits in the crop. Iris dark brown; feet bluish slate; bill greenish yellow" (*Olive*).

100. †Columba norfolciensis Lath.

Columba leucomela Salvad. t. c. p. 320.

A single male was shot on Mt. Bellenden Ker, where the species occurs in flocks. Mr. Olive did not meet with it in the low country. "Iris yellowish red; feet red; bill red; the orbital skin also red" (*Olive*).

101. Macropygia phasianella (Temm.); Salvad. t. c. p. 349.

Four specimens from Cooktown and three from Mt. Bellenden Ker.

These specimens seem rather small in dimensions, with the occiput in the *adult male* very much greyer than in specimens from Southern Australia. When a larger series of properly sexed specimens from definite localities is available, it will probably be possible to separate the North Queensland bird (subspecifically at least) from the form inhabiting New South Wales and South Australia.

The *males* sent by Mr. Olive seem certainly to approach *M. cinereiceps* Tristr., from the Louisiades and Southern New Guinea.

102. Chalcophaps chrysochlora (Wagl.); Salvad. t. c. p. 511.

Three specimens from Cooktown and many from Cairns.

Of Cooktown specimens Mr. Olive says that the species is common there only during the winter months, when it may be found feeding on the ground in parties of one, two, or three, but never more.

Iris brown; feet and bill red.

The Northern race of this widespread species has been separated as *Ch. longirostris* Gould; the differences in the size of the bill, however, are minute and apparently not very constant, when large series are available for comparison. The ashy bars on the back and rump seem somewhat more defined in birds from North Australia, as is also the case in specimens from Timor and the New Hebrides.

103. *Synœcus australis (Lath.); Ogilvie Grant, Cat. Birds Brit. Mus. xxii. p. 247 (1893).

Two pairs of adult birds from Cooktown belong to the smaller and greyer form, *S. cervinus* Gould.

"Iris brown; feet and legs yellow; bill horn-colour" (*Olive*).

104. †Excalfactoria chinensis lineata (Scop.); Ogilvie Grant, t. c. p. 253.

A single female from Bellenden Ker.

"Scarce; generally in pairs in thick grass, from which they are only flushed with great difficulty. Iris reddish brown; feet yellow; bill black" (*Olive*).

105. Catheturus lathami (J. E. Gray); Ogilvie Grant, t. c. p. 468; Le Souëf, Ibis, 1899, pp. 14, 16.

A fine series of this species in breeding and non-breeding plumage from Cooktown and Cairns.

It is very abundant at Cooktown and, though scarce on Mount Sapphiri, is evidently extremely common on the lower spurs of Mount Bellenden Ker.

Four males from Cooktown, shot in June and the latter part of September, show hardly any trace of the wattle at the back of the neck, which in one specimen from Mount Sapphiri, and in three others from Mount Bellenden Ker, shot

in October and November, has expanded to a large semi-circular collar some 80 mm. in diameter.

Non-breeding birds have the iris yellow, feet and bill black, head and upper part of neck red, the remainder being yellow.

Breeding birds have the iris brownish white, the feet *yellow*, the bill black, and the colours of the bare parts of the head and neck much brighter.

We have also received a large series of eggs of this bird obtained in the latter part of November and the first half of December, the greatest number found in one mound being thirteen, with three chicks.

The eggs are of a dull white colour, finely granulated in texture; they vary much in size, ranging from 94–104 mm. in length by 60–65 mm. in breadth, the average size being 99 × 63 mm.

106. Megapodius duperreyi Less. & Garn.; Ogilvie Grant, t. c. p. 454; Le Souëf, Ibis, 1899, pp. 14, 16.

A single specimen from Cooktown and several from Cairns, with a large series of eggs from the latter locality.

"Iris brown; feet and legs orange, with black edges to the scutes; bill brown" (*Olive*).

The eggs are in shape a long oval, from 86·5–96 mm. in length and 51–56 mm. in breadth. When fresh they are coated with a delicate soft layer of pinky-brown material, which darkens to coffee-brown with age. It is very deciduous, and can be readily removed by moisture and rubbing.

107. *Turnix olivii Robinson, Bull. B. O. C. vol. x. p. xliii; id. Ibis, 1900, p. 375.

We have as yet received only one female, from Cooktown, of this very distinct Bustard-Quail, which appears to have been hitherto confounded with *T. castanonotus*. It is, however, readily distinguishable by its considerably larger dimensions, and by the absence of white tips to the frontal feathers, and also, as Mr. Ogilvie Grant has kindly pointed out, by the longer and more slender bill.

"Iris yellow; feet yellow; bill brown" (*Olive*), dull greenish olive in skin.

108. †Hypotænidia philippinensis (Linn.); Sharpe, Cat. Birds Brit. Mus. xxiii. p. 39 (1894).

A pair from the swamps round Bellenden Ker.

"*Male*. Iris red; feet light brown; bill brown, reddish at base.

"*Female*. Iris chestnut; feet brown; bill reddish brown" (*Olive*).

109. †Rallina tricolor G. R. Gr.; Sharpe, t. c. p. 79.

Five specimens from Mounts Sapphiri and Bellenden Ker.

"Fairly plentiful, but very shy and crepuscular in their habits. About dusk they are to be seen hopping down from the thick scrub, where they pass the day, to the water, generally in parties of three; and the only way to secure them is to remain hidden on the edge of the creek from about 6 p.m. until it is quite dark. Iris red; feet slaty green or yellowish green; bill green" (*Olive*).

110. †Amaurornis moluccana (Wall.); Sharpe, t. c. p. 153.

Of this rare Gallinule Mr. Olive has sent us four specimens from Bellenden Ker, but has omitted to give us any particulars concerning them, having apparently considered them identical with the preceding species.

"Iris reddish brown; feet yellow; bill green; the frontal shield orange" (*Olive*).

111. †Porphyrio melanonotus Temm.; Sharpe, t. c. p. 205.

Two specimens only from Bellenden Ker.

"Scarce and shy, generally singly, and always near water. Iris red; feet red, with the joints slate-colour; bill red" (*Olive*).

112. †Heteractitis brevipes (Vieill.); Sharpe, Cat. Birds Brit. Mus. xxiv. p. 449.

Four specimens in winter plumage from the neighbourhood of Cairns.

"Fairly plentiful along the creeks. Iris brown; feet yellow; bill light slate" (*Olive*).

113. †Heteropygia acuminata (Horsf.); Sharpe, t. c. p. 566.

One male from Bellenden Ker.

"Iris brown; feet yellow; bill black" (*Olive*).

114. †Tringoides hypoleucus (Linn.); Sharpe, t. c. p. 456.

A single specimen from the mouth of the Mulgrave River, where the species was found to be very abundant on the shore. "Iris brown; feet yellowish white; bill black" (*Olive*).

115. †Ibis molucca Cuv.; Sharpe, Cat. Birds Brit. Mus. xxvi. p. 9.

A fine male in full breeding-plumage was secured on Nov. 29th. It has the bare skin under the wings bright brick-red, even in skin.

"Found near creeks and where the grass has been recently burnt, but not plentiful. Iris brown; feet red; bill black; bare parts black, with pink spots on the crown and back of head" (*Olive*).

116. *Herodias timoriensis (Less.); Sharpe, t. c. p. 98.

A single male in winter plumage was obtained in July at Cooktown.

"Very shy and scarce; found sparingly along creeks and lagoons; when flying their neck is carried doubled back on their shoulders. Iris yellow; feet and tarsi black; bill yellow" (*Olive*).

I (H. C. R.) found this and the succeeding species, and also what was probably *Mesophoyx plumifera,* fairly abundant in the flat country at the head of Princess Charlotte Bay in August 1896; they were, however, exceedingly wary, and I found it impossible to obtain specimens with a shot-gun.

117. †Notophoyx novæ-hollandiæ (Lath.); Sharpe, t. c. p. 109.

Adults and an immature bird from Mounts Sapphiri and Bellenden Ker.

"Fairly plentiful. Iris, feet, and bare parts yellow; bill slate-colour" (*Olive*).

118. †Garzetta nigripes (Temm.) ; Sharpe, t. c. p. 122.

A single male in breeding-plumage having the ornamental plumes on the breast and the dorsal tram, though the nape-plumes are not apparent.

"Scarce; the specimen sent was shot on a freshwater-creek. Iris yellow; feet black; bill black, the lower mandible partially yellow" (*Olive*).

119. Nycticorax caledonicus (Gm.); Sharpe, t. c. p. 158.

Specimens are sent from each locality visited; they are all adults, and most of them show the nuchal plumes indicative of breeding birds.

"Iris yellow, orbital skin greenish yellow; feet yellowish green; upper portion and tip of each mandible black, the lower portion yellowish" (*Olive*).

120. †Phalacrocorax melanoleucus (Vieill.); Ogilvie Grant, Cat. Birds B. M. xxxvi. p. 398.

A small series in freshly-acquired breeding-plumage from the neighbourhood of Mt. Bellenden Ker.

"Iris brown; feet black; bill and bare parts yellow" (*Olive*).

121. †Anseranas semipalmata (Vieill.) ; Salvad. Cat. Birds Brit. Mus. xxvii. p. 44.

Three specimens in very worn plumage and with the under surface much stained with rust are sent from Bellenden Ker.

122. *Nettopus pulchellus Gould; Salvad. t. c. p. 67.

Apparently of only sporadic occurrence in the neighbourhood of Cooktown. Mr. Olive obtained four specimens out of one flock, which he says was the first seen in the district for years. I (H. C. R.) found it abundant in the neighbourhood of the Kennedy and Hann Rivers, considerably to the north of Cooktown, in August 1896, when it afforded a welcome addition to our fare. Ramsay (P. Z. S. 1877, p. 346) notes it as exceedingly rare in Eastern Queensland, whence he had seen only three skins—much rarer than *N. albipennis*, which, curiously enough, Mr. Olive has not obtained.

"Iris brown; feet blackish slate; bill brown. Food, seeds and weeds." (*Olive*).

Count Salvadori, in his Key to the subfamilies of the *Anatidæ*, makes *Nettopus* fall into the section with the hind toe *not* lobed. In this species and in *N. coromandelianus* (Blanford, Faun. Brit. Ind., Aves, iv. p. 433) the hind toe is distinctly lobed; more so certainly than in some species of *Dendrocygna*.

123. *Dendrocygna arcuata (Cuv.); Salvad. t. c. p. 153.

A single specimen only from Cooktown.

"Plentiful when there is dry weather inland; coming here only at night and returning inland at daylight, sometimes in pairs, but more generally in flocks. This one was in the river by itself, having evidently got separated from its mates. Very shy and quick on the wing, uttering a whistling sound when flying. Iris brown; feet and bill black. Food, seeds and weeds." (*Olive*).

124. †Anas superciliosa Gm.; Salvad. t. c. p. 206.

Numerous specimens.

"Rather scarce, occurring in flocks of about 20, feeding in the swamps at the foot of the mountains. Iris brown; feet yellowish; bill black or greenish slate." (*Olive*).

125. †Casuarius australis Wall; Salvad. t. c. p. 594.

Abundant in the scrubs round Mount Sapphiri.

Mr. Olive tells us that he secured an adult which was remarkable for having a layer of fat half an inch thick all over the body. The skin has not yet been received.

In conclusion we must express our thanks to Mr. Peter Cowell, Chief Librarian to the City of Liverpool, and to the Committee of the Free Public Museum, Liverpool; also to the Hon. Walter Rothschild and Mr. Hartert for the use of material belonging to the Tring Museum.